

## ABSTRACT OF THE DISCLOSURE

The present invention relates to a method of fabricating a semiconductor device that allows assuredly ion implanting an impurity to a support substrate and a semiconductor device that can rapidly operate an electric potential of the support substrate. According to the present fabricating method, an impurity is ion implanted over an entire surface of a support substrate under a buried oxide film; accordingly, the impurity can be delivered to other than a bottom portion of a contact hole. Accordingly, a low electric resistance layer extending from a lower portion of an element formation region to a lower portion of an element isolation region can be formed. As a result, an electric current can be flowed much from a contact to the support substrate at the lower portion of the element formation region. Accordingly, electric charges can be rapidly supplied to the support substrate at the lower portion of the element formation region, resulting in rapid operation of an electric potential of the support substrate at the lower portion of the element formation region.